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Preliminary Copy
University of Idaho

Soil Conservation Service

68 Ida 0514 (Taney Silt Loam)

General Site Characteristics

Location -- Benewah County, Idaho, south of Tensed, 600 feet south and 900 feet east of the northwest corner of section 34, T. 43 N., R. 4 W.; described -- June 19, 1968, by Biggerstaff and Moore; topography -- rolling loess upland, slightly convex, 20 percent slope; elevation -- 2,700 feet; aspect -- southwest; parent material -- loess; drainage -- well; erosion -- slight; permeability -- moderate in upper sequum, slow for B2t and below; root distribution -- few roots to 33 inches, negligible below 33 inches; vegetation or use -- fallowed field; classification -- fine, silty, mixed mollic Eutroboralfs.

Pedon Description

Ap 0-10 inches. Brown (10YR 5.4/3), silt loam, dark grayish brown (10YR 4/2) moist; weak medium to fine subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; non-calcareous; few micro and very fine roots; interstitial pores; clear smooth boundary.

B1 10-16 inches. Brown (10YR 5.4/3), silt loam, dark grayish brown (10YR 4/2) moist; weak medium prismatic to weak medium to fine subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; non-calcareous; few micro and very fine roots; common fine tubular pores; diffuse smooth boundary.

B2 16-24 inches. Pale brown (10YR 6/3), silt loam, yellowish brown (10YR 5/6) moist; weak medium prismatic structure; slightly hard,

friable, slightly sticky, slightly plastic; non-calcareous; few micro and very fine roots; common fine tubular pores; trace of small Fe and Mn concretions; clear smooth boundary.

A'2 24-28 inches. Light gray (10YR 7/2), silt, pale brown to brown (10YR 5.5/3) moist; massive, slightly hard, very friable, slightly sticky, slightly plastic; non-calcareous; few micro roots; common fine tubular pores; many bleached grains; common Fe and Mn concretions larger than 2 mm.; diffuse smooth boundary.

B & A 28-33 inches. Light yellowish brown (10YR 6/4), silt loam, yellowish brown (10YR 5/6) moist; moderate coarse prismatic structure; hard, firm, sticky, plastic; few micro roots into peds; commone fine tubular pores; medium nearly continuous clay films on vertical and horizontal pore surfaces; many Fe and Mn concretions larger than 2 mm.; tongues of A'2; Mn staining on peds; gradual smooth boundary.

B'21t 33-50 inches. Light yellowish brown (10YR 6/4), dark yellowish brown (10YR 4/4) clay films, silt loam, yellowish brown (10YR 5/6) moist; moderate coarse and medium prismatic to fine prismatic structure; hard, firm, sticky, plastic; non-calcareous; common fine tubular pores; medium nearly continuous clay films on vertical and horizontal pore surfaces; common Fe and Mn concretions larger than 2 mm.; Mn staining on peds; fragipan is minimally expressed in horizon; possible organic staining; diffuse smooth boundary.

B'22t 50-60 inches. Light yellowish brown (10YR 6/4), silt loam, yellowish brown (10YR 5/6) moist; moderate coarse to medium prismatic to medium subangular blocky structure; very hard, firm, sticky, plastic; non-calcareous; common fine tubular pores; medium nearly continuous clay films on vertical and horizontal pore surfaces; common Fe and Mn concretions larger than 2 mm.

Chemical characterization and physical analysis of profile Taney 68-5 68 Ida 0514

Benewah County SCS No. 68-5

No.	Horizon	Depth in.	pH Paste	pH 1:5	ECx10^3	Saturation extract me/1000 gms soil Ca	Mg	Na	K	CO_3	HCO_3	Cl	SO_4
1	Ap	0-10"	5.69	5.94	0.35								
2	B1	10-16"	5.71	6.20	0.29								
3	B2	16-24"	5.78	6.45	0.23								
4	A' 2	24-28"	5.83	6.47	0.18								
5	B & A	28-33"	5.55	6.47	0.22								
6	B21t	33-50"	5.85	6.82	0.17								
7	B22tx	50-60+"	6.00	6.94	0.24								

Extractable ions me/100 gms Ca	Mg	Na	K	H	C.E.C. meq/100	Base Sat.%	Gyp.	$CaCO_3$	E.S.P.	C	O.M. %	N %	C:N	Pw at sat.	Soil:Rx Ratio
7.19	1.09	0.25	0.45	9.14	14.50	49.56				1.645	2.80	0.109	14.97	43.0	
7.63	2.90	0.26	0.44	7.61	15.52	59.61				0.687	1.18	0.069	10.01	46.0	
6.25	2.04	0.26	0.28	4.57	12.47	65.90				0.536	0.92	0.052	10.37	45.0	
6.25	3.12	0.27	0.19	5.58	12.29	63.79				0.228	0.37	0.034	6.65	50.0	
12.31	6.12	0.58	0.27	4.44	21.34	81.28				0.344	0.35	0.036	9.49	50.0	
11.25	5.86	0.58	0.27	6.60	22.55	73.13				0.227	0.39	0.036	6.38	50.0	
9.88	5.03	0.55	0.24	6.85	18.76	69.62				0.219	0.38	0.039	5.63	50.0	

Profile Taney 68 Ida 0514 September 2, 1969

No.	Particle size distribution (mm) (percent)								Gravel & Stone, etc.	Texture Class
	VCS 2-1.0	CS 1-0.5	MS 0.5-0.25	FS 0.25-0.05	VFS 0.1-0.05	TS 2.05	TSi 0.05-0.002	TC <0.002	>2mm	
0-10	02	.06	.18	1.05	5.67	6.98	75.97	17.05		Silt loam
10-16	.04	.12	.13	.92	1.91	3.12	76.74	19.18		Silt loam
16-24		.03	.05	.80	3.37	4.26	81.13	14.62		Silt loam
24-28	.03	.10	.15	1.03	5.06	6.36	82.27	10.55		Silt
28-33			.02	.42	3.75	4.20	71.88	23.92		Silt loam
33-50		.06	10	.58	2.39	3.12	72.40	24.48		Silt loam
50-60	.03	.06	07	.47	3.64	4.27	74.24	21.48		Silt loam

Bulk Density

	g/cc
0-10	1.45
10-16	1.43
16-24	1.54
24-28	1.72
28-33	1.77
33-50	1.76
50-60	—